1. We define reliability as the ability of the machine to correctly sort all the inputted disks. We validate the reliability of the machine by checking the correctness of the code running the machine and also by conducting long-term test. Reliability is mainly reflected in our decision to encase the conveyer belt so that it is prevented any possibility of the discs, that are transported, to slip out. The goal of the project cannot be met with an unreliable design.

2. The speed of the machine is defined by the number of disks sorted in a unit of time. We search to select the design solution that improves this number. Speed is essential to offer a pleasant experience operating the machine, also speed is the first thing that stands out when two machines of this sort are compared.

3. We define robustness as the fact that the machine does not brake easily. The validation is if the machines state wouldn’t be changed, wouldn’t break during : build phase, test phases, simulations, transportation and the end process, all during the period of the project cycle. Then we can consider the machine to be robust. Robustness can be observed from our design solution from the partial encasing used. Also the disc container was design to be robust do to its shape, size and simplicity. We do not meet our project goal if the machine isn’t capable of running during the final process.

4. We define user accessibility as the ease in which the user takes the actions required from the machine. The validation is done by checking the compatibility of the design with the user constrains. The disc container was built with user accessibility in mind, it is fairly easy and fast to load discs. The reason why this priority is important is that the machine requires a user to be operated and in consequence its operation must be possible.

5. We define amount of space by the amount of floor space that the machine occupies. Validation of the low amount of space is done by checking if there are useless components in the machine or other components that can be replaced with smaller counterparts without influencing the priorities above. From this perspective the current Feeder occupies a small amount a space, while the other feeder design would of forced us to add an extra floor extension because of its large dimensions. The reason of this priority is to ease the transportation and storage of the machine.

6. The Difficulty of Building is self-explanatory. We validate this be checking if there are any useless components. In our decision to have the conveyer belt larger, trying to fit on the platform size, we simplified the design and left more physical space to work on the other components connected to the machine. Opting for such a priority would make our solution easy to implement.

7. The Amount of Parts of the Machine is also self-explanatory. We also check if there are any useless parts. An example were we used very little parts by choice in our machine is the feeder component. Reasons why we picked this priority is that it might improve the overview of the machine and also the error-detection .